

OBJECTIVE 27: INGESTION EXPOSURE PATHWAY - PROTECTIVE ACTION IMPLEMENTATION

OBJECTIVE

Demonstrate the capability to implement protective actions for ingestion exposure pathway.

INTENT

This objective is derived from NUREG-0654 which provides that OROs should have the capability to implement protective actions for the ingestion pathway emergency planning zone (EPZ). (See evaluation criteria from Planning Standards E., J., and N.) Guidance for the ingestion pathway is contained in FEMA Guidance Memorandum (GM) IN-1, The Ingestion Exposure Pathway, dated February 26, 1988, and is incorporated in this Manual by reference.

This objective focuses on those actions required for implementation of protective actions, and is directly related to Objective 26, Ingestion Exposure Pathway - Protective Action Decision Making, which deals with decision making.

DEMONSTRATION CRITERIA

NUREG

CRITERION

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| J.9.,11. | 1. The ORO has available adequate information regarding water and food supplies and food and milk and agricultural production within the ingestion exposure pathway emergency planning zone for implementation of protective actions. |
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Explanation

Responsible OROs should demonstrate the capability to secure and utilize current information on the locations of dairy farms, meat and poultry producers, fisheries, fruit growers, vegetable growers, grain producers, food processing plants, and water supply intake points within the ingestion pathway EPZ. The ingestion pathway EPZ is the area within an approximate 50-mile radius centered at the nuclear power plant. Available information should include maps showing specific locations of these facilities and listings of the locations with current telephone numbers and contacts.

Extent of Play

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Under this criterion, all activities should be completed as they would be in an actual emergency.

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CRITERION

E.5.,7.

- 2. Appropriate pre-printed information and instructions on ingestion exposure pathway protective actions are available for rapid reproduction and distribution to pre-determined individuals and businesses.**

EXPLANATION

Responsible OROs should demonstrate the capability to locate all pre-printed forms and messages designated in the plan for use in notifying other OROs and the public of the recommendations (or orders) regarding protective actions for the ingestion exposure pathway. OROs should also demonstrate the capability to access and use facilities for making the necessary copies in a timely manner.

EXTENT OF PLAY

Under this criterion, all activities should be carried out as specified in the plan, unless deviation from the plan is provided for in the extent-of-play agreement, such as the number of copies to be made.

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CRITERION

J.9.,11.

- 3. Appropriate measures and strategies are developed for implementing protective action decisions for contaminated water and food products and milk and agricultural production.**

Explanation

Responsible OROs should demonstrate the capability to implement protective actions in the ingestion pathway EPZ. Implementation of protective actions for the ingestion pathway EPZ typically begins during the emergency phase, with precautionary actions for dairy cattle, and may continue well into the recovery phase. Protective actions may be directed at the general public or specific groups within the local food industry. OROs should

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demonstrate the capability to utilize the Emergency Broadcast System (EBS) and other notification methods to provide protective action instructions to the public. Recommendations or orders may relate to food handling (e.g., extra washing of home garden vegetables), production techniques (e.g., use of stored feed for animals), processing techniques, and embargoing or destroying contaminated foodstuffs.

OROs should demonstrate the capability to impose appropriate procedures to control the physical movement of foods. This decision may be based on recommendations of the appropriate health or agricultural agencies. Food supplies may be restricted at the point of origin or distribution, confiscated, stored, or destroyed.

Extent of Play

Under this criterion, all activities should be performed as they would be in an actual emergency. Development of measures and strategies for implementation of ingestion pathway EPZ protective actions should be demonstrated during exercise play by formulation of protective action messages to the general public and food producers and processors. For example, instructional and educational messages on ingestion pathway measures should be developed for EBS broadcast. Although actual broadcast of messages is not necessary, confirmation that the broadcaster(s) are aware of the procedures and authorization process and location of any pre-printed releases is encouraged.

Demonstration of this objective by responsible OROs should include selection of appropriate instructional material to be printed and distributed within the ingestion pathway EPZ at the time of the emergency. However, actual printing and distribution is not necessary for the exercise.

OROs should demonstrate the capability to controls, restrict or prevent distribution of contaminated foodstuffs by commercial sectors should be demonstrated by administrative orders issued through health or agricultural agencies. Exercise play should include demonstration of communications and coordination between organizations to implement protective actions. However, actual field play of implementation activities may be simulated. For example, communications and coordination with agencies responsible for enforcing food controls within the ingestion pathway EPZ should be demonstrated, but actual communications with food producers and processors may be simulated.

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- N.1.a.** **4. All activities described in the demonstration criteria for this objective are carried out in accordance with the plan, unless deviations are provided for in the extent-of-play agreement.**

Explanation

Responsible OROs should demonstrate the capability to follow policies, implement procedures, and utilize equipment and facilities contained in the plans. OROs should demonstrate that they can follow sequences outlined in the various procedures and perform specified activities, as necessary.

Extent of Play

Under this criterion, all activities should be carried out as specified in the plan, unless deviation from the plan is provided for in the extent-of-play agreement.

CLARIFICATION OF TERMS

The following definitions describe the limited meaning of terms in the context of the Exercise Evaluation Methodology and may vary from the full technical definition for all circumstances.

Emergency phase refers to the initial phase of response actions, during which actions are taken in response to a threat of release or a release in progress.

Precautionary action is a protective action taken on the basis of the potential for a release of radioactive material, such as an embargo of food products.

Recovery refers to the process of reducing radiation exposure rates and concentrations in the environment to acceptable levels for unconditional occupancy or use after the emergency phase of a radiological emergency.